

Assassin's Creed: A Multi-Cultural Read

Magy Seif El-Nasr

School of Interactive
Arts and Technology
Simon Fraser
University
magy@sfu.ca

Maha Al-Saati

School of Interactive
Arts and Technology
Simon Fraser
University
malsaati@sfu.ca

Simon Niedenthal

Associate Professor
Malmö University
Center for Game
Studies
Simon.Niedenthal@mah.se

David Milam

School of Interactive
Arts and Technology
Simon Fraser
University
dma35@sfu.ca

“Walking towards the city of Jerusalem evoked much emotion; my heart beats as I approach. As I hear the chanting of the monks, the sounds of the church bells, I know I am closer to this magical city—this place of conflict. As I reach Jerusalem, I listen carefully; perhaps I can hear the sound of an Athaan¹ piercing through the skies. To many people of the Monotheistic religions, Jerusalem is a holy land. To go there, is a journey of a lifetime, a dream, perhaps they would want to fulfill at one point in time. For a Middle-Easterner, wandering through the *Assassins' Creed* game world might be purely driven by nostalgia, in the hope of identifying with the elements of the past. I was in it to explore a heritage many, like me, have deemed lost.” —Maha Al-Saati, of Middle-Eastern origin.

“I spent a fair amount of time during December 2007—a month during which my town in Sweden got a sum total of 6 hours of direct sunlight—in hot, sunny and dry conditions. Unlike the thousands of Swedes who fled the gloom to places like Thailand aboard chartered jets, I was bathing in the simulated radiance of medieval Jerusalem, Acre, and Damascus in the game *Assassin's Creed*, climbing towers and mosques, leaping along rooftops, knocking off a few conspirators.” —Simon Niedenthal, of Western origin.

Abstract

Video game playing is becoming a predominant part of popular culture. Games, like *Assassin's Creed* (Ubisoft, released 2007), *The Sims* (Maxis, released 2000), *Guitar Hero* (RedOctane, released 2005), and *World of War Craft* (Bilizzard, released 2004), have attracted players from many different cultures and age groups. In this paper, we propose that the experience of playing a video game, like *Assassin's Creed*, is a personal experience shaped through one's emotional values, expectations, knowledge, and attitudes as influenced by culture. As we set out to review the *Assassin's Creed* game, we discovered that each one of us had a different experience with the game. In this paper, we draw on our *Assassin's Creed* play sessions. This experience is shaped by our different cultural viewpoints, including Middle-Eastern and Western, as well as intellectual disciplinary backgrounds, which include architecture, theatre, and computer science. To Maha and Magy, for example, the game aroused many nostalgic feelings through its simulated Middle-Eastern cities, the use of Arabic words, accents and gestures, and the detailed Middle-Eastern architectural design. While such small details meant much when viewed by Maha and Magy, their values were different when viewed by Simon and David. To both Simon and David, the game play experience was heightened through the beautiful architectural detail and the use of the environment layout as a function of gameplay, such as the use of rooftops for platforming, fast movement and flying-like actions, and stealth. This collaborative game review suggests that a game is, in interesting ways, experienced and perceived differently by players from divergent cultural-linguistic situations.

Introduction

Games are becoming increasingly popular. While walking down a city street, it is not unusual for one to hear the voices of excited players talking about their favourite games. Today's games are utterly complex and rich, integrating elements of narrative, puzzles, and many play genres. While game studies and reviews attempt to discuss games and their play experiences through a single authoritative lens, we argue that the play experience of a game is highly variable and is shaped by the players' culture, past experience, and attitudes. Staiger discusses how the interpretation of events in a film is shaped through the audience's mind and is influenced by "aesthetic preference and practices, knowledge and expectations prior to attending to the moving images, and experiences in the exhibition situation" (Staiger, 2000, pp. 21). Similarly, the interpretation of game events is also dependant on these variables, which results in variations in the game experiences among different groups.

To further define the experience of playing a game, we adopt Boorstin's (1990) three perspectives of viewing a film. One perspective he called the *voyeuristic eye* which he described as the feeling of joy resulting from discovery and learning. Another perspective, he called the *vicarious eye*, which he defined as the feeling of empathy through an understanding of characters' emotions and choices. The last perspective he defined as the *visceral eye*, which is the feeling of enjoyment as a result of simple emotional reactions to audio-visual stimuli. As one can see, each of these perspectives highly depends on factors, including cultural attitudes, expectations, and prior knowledge. In particular, the *voyeuristic eye* depends highly on previous experience and expectations, *vicarious eye* highly depends on cultural beliefs and understanding, and *visceral eye* depends on individual preferences and attitudes.

In this article, we discuss this argument through a review a specific game: *Assassins' Creed*, as it was played by the four co-authors of this paper. We review this game from different cultural viewpoints exploring the richness of the different play experiences. The four co-authors come from different cultural perspectives: Maha from Saudi Arabia, Magy from Egypt, David from United States, and Simon from United States. They also represent four different intellectual disciplinary orientations, including architecture (Simon, Maha, and David), design (Simon and Magy), computer science (Magy), and theatre (Magy). Section 2 discusses the authors' background outlining the various cultures, and intellectual backgrounds that the authors represent.

Assassins' creed is a great example to review in light of these diverse backgrounds and approaches to playing the game. The game received mixed reviews. Most positive reviews (Van Ord, 2008) focused on the richness of the world, the aesthetically pleasing environments, and the depth of details and architectural structures. The negative reviews (Joynt, 2008), on the other hand, focused on the repetitive nature of the game-play and experimental nature of blending stealth, action, and platforming mechanics. In this review, we focus on the game-play experience as a function of cultural background. It should be noted that the discussion in this article cannot be generalized as we discuss experiences of four people and did not design this as a formal study. However, we outline several differences in cultural backgrounds that make the play experience

different, including knowledge of the game's back-story, the back story's religious or cultural values, emotions tied to the architecture, environments, cities, historical figures, language, and places used, and expectations of events, structures, or behaviours as implied through knowledge and memory.

Assassins' Creed's plot is composed of two parallel plotlines, each taking place at a different time. In one plotline, the player assumes the role of a bartender named *Desmond Miles*; the narrative takes place during the future time. As Desmond, the player has very little interaction; he is forced to use a machine called *the Animus* to transcend back in time through the memories of one of his ancestors, *Altair Ibn La-Ahad* (an Arabic phrase meaning 'the flying one, son of none'), who was part of the Assassins' cult at that time. The player assumes the role of *Altair* in the second plotline of the game, which takes place during the third crusade in the 12th century, around the year of 1191. *Altair's* objective is to kill nine historical figures, who are presumed to be traitors. Most of the game-play occurs within this plotline, where the player assumes *Altair's* identity and goes on missions to kill nine historical figures one at a time.

The year 1191 is a time of conflict, a time of war between Crusaders and Saracens. Several movies highlighted this conflict, including *Kingdom of Heaven*. The reference to this time period evokes many emotions among the Middle-Eastern community. Interestingly, the story of the game is centered on the myth of the Assassins rather than the obvious conflict between the Crusaders and Saracens. While the story of the Assassins cult is not well-known among all Middle-Easterners, it is known to some. Recently (during the month of March), Egyptian TV aired a show specifically discussing the story of the Assassins and its religious ties (*Kesat el hashasheen* on El Kana el Fadaeya channel, 15th March 2008). Thus, for people who know this story, the chosen back-story interestingly taps into another conflict — a conflict between different Muslim divisions. While this may provide several motivations for playing the game, it also implies that the meaning of the game and the play experience is different depending on who plays the game, how much of the story and conflict is known, and whose side they are on. Section 3 explores this back-story in depth, discussing the history of the tale and the internal conflict involved.

The game is composed of nine missions; each mission is stationed in a different part of each of three cities in the Middle-East: Acre, Damascus, and Jerusalem. To achieve the missions, the player must use stealth, information gathering tactics, including eavesdropping, pick pocketing, and forceful interrogation. The game also includes many side missions, such as quests to fulfil for informers, saving citizens who are being harassed by city guards, hunting Templars, and collecting flags. As one ventures through the environment and explores the different cities, one cannot help but admire the detailed architecture and landscape. The attention to lighting, decorations, detail, environment layout, crowds, and crowd movements are quite nicely integrated within the game. We suggest that such attributes have influenced the play experience, as described in (Van Ord, 2008), as they evoke the type of engagement that Boorstin (1990) calls the vicarious eye, as they allow participants to suspend their disbelief and transport themselves to the game world — situated a thousand years ago.

Experiencing this environment is different for a Middle-Easterner who grew up and lived in the Middle-East. Believability of the architecture and lighting becomes an

important factor, since Middle-Easterners know the places very well. Although the game takes place almost a thousand year ago, we can assume that some of the predominant Middle-Eastern architectural patterns used back then are known to many Middle-Easterners, since such influence still resonates in many of the buildings found in the current cities. *Assassins' Creed* provides a sensational and plausible representation of a Middle-Eastern environment as it may have existed almost thousand years ago.

The attention to detail not only provides credibility to the game, but it also brings nostalgic feelings especially for Maha and Magy, who are from Saudi Arabia and Egypt, respectively and have been away from home. For David and Simon, such detail and composition have made these cities enjoyable to navigate as they provide a way of seeing new and interesting cities that are so different from their own. Section 3 will discuss several Middle-Eastern architectural and environmental patterns within *Assassins' Creed*. We will discuss aspects of the environment design, including lighting, shading, architecture, ornaments, and calligraphic details etched in the buildings. We will also discuss how such details are differently viewed from multi-cultural viewpoints.

Additionally, the inclusion of crowd and crowd movement, gestures, and random dialogue and city noises contributed in arousing these nostalgic feelings for Maha and Magy. Section 4 will discuss characters, crowd movements and how such elements of the game are viewed through different cultural eyes. We will also outline some of the differences between movements that were more emphasized when viewed by Magy, who has a theatre background.

Assassins' Creed provides a great game to analyze through a cultural lens. It should be noted that the article emphasizes architecture, story, and character designs rather than game mechanics or systems as discussed by Church (1999) or Tracy Fullerton, Chris Swain, and Steven Hoffman (2004). While game mechanics and systems are important, we believe that architectural design, character design, and back-story play important roles in engagement and shaping the game play experience within games, such as *Assassins' Creed*, that rely heavily on exploration of space and narrative as part of their 'fun' or engagement aspect (as discussed by Hunicke et al.'s aesthetics model (2004) and Jenkins (2004)). As we discuss story, character, and architecture, we also draw on an interview with the producer of the game, Jade Raymod, discussing the game design process and pointing out some of the developers' design choices. We will conclude the article by summarizing the argument and its impact on future games.

About the Authors

Magy Seif El-Nasr is currently an assistant professor at Simon Fraser University, teaching game design and development and exploring the design of new interaction models around engagement and engagement patterns within video games. Magy was born in Cairo, Egypt, where she spent most of her childhood. For a couple of years during her childhood and teenage years, she traveled and studied in Arabic countries, including Kuwait (Kuwait), Dubai and Abu Dhabi (in United Arab Emirates). She earned her Bachelor of Science in 1995 from the American University in Cairo. She then joined an advertisement company where she designed and developed simple animated advertisement clips (30 sec-1 min in length). In 1996, she began her Master's degree at Texas A&M University in the United States. From there she went to Chicago, Northwestern University, for her Ph.D. Although she got her PhD in Computer Science, during her study at Northwestern she was able to spend time in both computer science and theatre departments. In theatre, she particularly focused on lighting design, acting, and directing. She then produced, developed, and directed *Mirage*, her first interactive drama based on the Greek Tragedy *Electra*. Her interdisciplinary background is unique, since she studied and worked in theatre, advertisement, and computer science.

Maha Al-Saati is currently a PhD student at Simon Fraser University, where she is researching how narrative derived from people's building patterns affect the growth of urban built-environments. This is done in relation to procedural environments. Her Bachelors and Masters degrees of architecture were obtained from King Faisal University, Dammam, Saudi Arabia. While doing her Masters, she developed an interest in the development of historic Islamic/Arab cities, and how they evolved in a bottom-up process. Her methodology views the environment as a set of dynamic processes, rather than a combination of visual elements. Her Masters thesis: "Open Duplex House" derived building patterns and conventions from existing modern-day buildings in the Saudi context. These patterns were later used to create house structures that are built to change. Maha was born and raised in Dhahran, Saudi Arabia. Her ancestry roots traces back to Arab and Uzbek decent.

David Milam is currently a PhD Student at Simon Fraser University where he is researching how game design, development and evaluation can borrow or influence education and social sciences. David was born in Southern California, USA; his ancestry roots trace back to English and Austrian decent. Although David has not visited Arabic countries, he has participated in a variety of cultural exchanges travelling, living, studying, and working abroad in European and Asian countries. When he was sixteen, he participated in a Youth for Understanding exchange summer program in France. Later while studying as an undergraduate in Architecture at the University of Southern California, he had the opportunity to spend a semester abroad in Italy. After completing his Master's in Design at Harvard, he worked in the Netherlands for nine months in a multidisciplinary design office. David has had few opportunities to directly experience Middle-Eastern culture first hand aside from studying Islamic/Arab architecture during his undergraduate architecture curriculum. He feels very fortunate to have participated in this study.

Simon Niedenthal is an associate professor of interaction design at Malmö University in the School of Arts and Communication (K3). His research interests include digital game aesthetics, simulated illumination, and design process for games and interaction, and he has been published in scholarly periodicals including *Leonardo*, *Cyberpsychology and Behavior*, and *Game Studies*. Simon was educated in the U.S and Canada, and has dual citizens of the U.S and Sweden. He has previously visited Turkey.

Story

The game develops into two plotlines. The first plotline is situated in the year 2012, and the player takes on the role of a barkeeper named *Desmond Miles*. Desmond has been kidnapped and brought to a research lab, where he is kept as a prisoner under the care of two researchers, who work on the *Animus* project. These researchers are looking for any information that may allude to the whereabouts of a piece of an artefact called *Eden*, thought to cause mass hypnosis. The researchers found a tie between *Eden* and the members of an Assassins' cult in the 12th century. With the help of the *Animus*, they are able to extract memory encoded in the DNA of a subject, and thus they can extract memories from descendants of members of the Assassins' cult. Desmond was chosen because he is the descendant of *Altair*, who is thought to be a member of the Assassins' cult.

The second plot takes place in 1191, a time of conflict, war, and turmoil, which creates an interesting dramatic structure for the game. This plotline begins with Altair (the character the player is playing) failing to assassinate Robert IV de Sable, Master of the Knights Templar. *Al-Mualim* (an Arabic word means Teacher), the leader of the Assassins, strips Altair of his rank and power, but offers him a chance to redeem himself by finding and assassinating nine power figures. The player then takes on the role of Altair and uses a number of stealth-based game mechanics and tactics to assassinate these nine power figures.

The game ends when Desmond inherits Altair's abilities, e.g. Eagle vision. At this point in the game, Desmond, though Eagle vision, sees several messages written on the walls of his room – messages referring to biblical passages and a reference to a date December 21, 2012, when they will launch a mysterious satellite the Templars have created, which they claim will *permanently* end the war.

Back-story

The game takes place in a time of conflict, both politically and religiously, and during our play of the game, we wondered about the back-story of the Assassins. Was the game a great work of fiction, or was it based on historical facts? If so, to what extent were the events historically correct? To answer these questions, we interviewed Jade Raymond, producer of the *Assassins' Creed* game. When asked about the origin of the story, Jade says:

Assassins' Creed is a speculative fiction and it's a fun genre to work in. By grounding a story in reality, you increase its credibility. Suspension of disbelief becomes easier because it's happening in our world. You're exploring cities that still exist today – encountering infamous individuals whose names everyone knows - witnessing

battles that really occurred. At the same time, because our setting is far removed in time (this is nearly 1000 years ago), there's plenty of freedom to take a revisionist approach, tweak people's personalities and motivations. It's fun to explore the idea that something else was happening beneath the information gleaned from historical textbooks. People are also fascinated by "History's Mysteries," and the Templar Treasure was ripe for exploring. What did the Templars find beneath Solomon's Temple? Why did they want it? Where is it today?

The same can be said for the Assassins themselves. We know a little bit about them, but their very nature made them a secretive bunch. Most of what's known comes from third hand accounts. These were very likely orchestrated events, carefully planned by the Assassins to ensure a specific, controlled image was portrayed. Who were they really? What motivated them? What secrets were members given access to as they rose through the ranks? These were all questions we get to play within the story. And the answers are pretty interesting.

(April 15, 2008)

The origin of the Assassin's creed back story is the myth of the *Hashashin* (Daftary, 1994). *Hashashin* is an Arabic word which means *Hashish*-users. *Hashish* is a narcotic drug that grows in the Middle East. The story dates back to *Hassan ben Al-Sabbah* (1034-1124), who is known to be the Grand Master of the Order of the Assassins. He was brought up in *Rayy*, an old city, few Kilometers south of the modern city of Tehran. The creation of the order of Assassins was motivated by politics and religion. The developers of *Assassins' Creed* were aware of this story, but the events depicted in the game are fictitious, as described above.

For people who are aware of the history of the assassins cult, their story, and depiction in the game elevates a different conflict – a conflict between Islamic divisions. Before we discuss this fascinating back-story, we will briefly touch on the religious background presumed in the game.

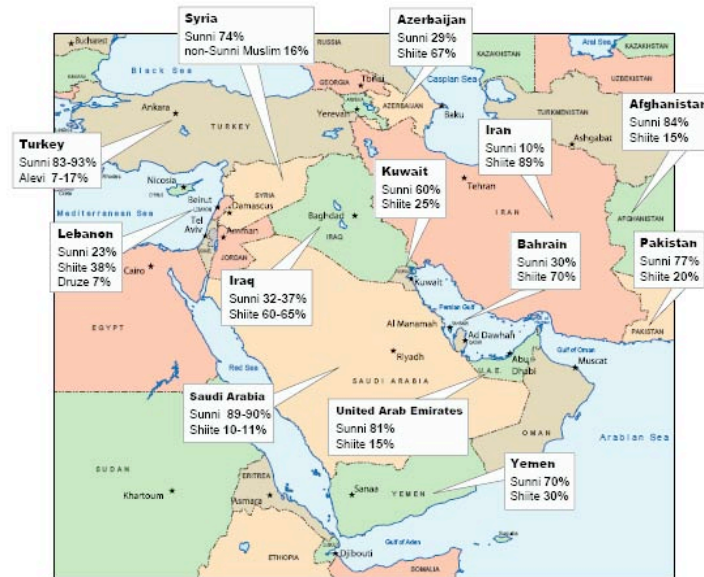


Figure 1. The percentage of Sunni and Shiite Muslims in the Middle-East. **Source:** Congressional Research Service, 2004.

Islamic Divisions

There are two major divisions in Islam, each with their own practices, beliefs and interpretation of the Quran and the teachings of Prophet Muhammadⁱⁱ. These two main divisions are: Shiite (a.k.a Shi'a or Shi'ate) and Sunni Muslims. Figure 1 shows those divisions through the Middle-Eastern map (Congressional Research Service, 2004). As shown, Sunni Muslims occupy a larger number of the Muslim body today.

Several schools of thought branched out of each of these two divisions. One of relevance to the story discussed here is the Ishmaili (a.k.a., Isma'ili or Ismaili) school of thought within the Shiite division. The Ishmaili school of thought was founded around the middle of the 8th century. This school formed two states of its own: the Fatimid Empire and Nizari State, where the later was said to be formed by *Hassan Al-Sabbah* himself (Daftary, 1994).

Hassan Al-Sabbah (the Old Man of the Mountain)

“Just forget about the war of the different nations, since they couldn't find the truth, each of them made-up their own story.” (verse from Sheikh Saadi's (1213-1292) poetry, translated by writer and poet Hamid Maygoli who studied Persian Poetry).

Hassan Al-Sabbah's true story is unclear. Daftary (1994) discusses different variations of the story in his book, making the point that there have been many variations of the story that were made up or completely untrue. However, even though the story is debatable, a version of it is evident in the hearts and minds of many people in the Middle-East and Europe. This makes it very relevant to the game as it shapes the experience of game-play through expectations, memory, and knowledge. We will discuss a version of this back-

story here. We do not claim that this is the true version. Instead, we are using this version as an example of the story for the reader to understand the role of the back-story in shaping the game-play experience.



Figure 2. *The Alamut fortress, in reality and literature.* Sources: (left and center) <http://www2.irna.ir/occasion/es/index1.htm> (right) <http://ismaili.net/histoire/photo/28alamut.jpg>

Hassan Al-Sabbah was born to a family who practiced Shi'ism. He was not originally a follower of the Ishmaili school of thought. After his visit to Egypt, during the Fatimid Empireⁱⁱⁱ (900s-1160s), he started following the Ishmaili school of thought. After much time spent in search for faith, it is said that *Hassan Al-Sabah* returned to Persia to form a base from which he could spread his teachings and beliefs. In 1088, he captured the *Alamut* (also called Castle of death), see Figure 2. It is said that he named it *the Assass* (Arabic word meaning foundation) (Maalouf, 1994), from which he could spread his beliefs (Willey, 2001; Daftary, 1995; Silvestre de Sacy, 1818).

Alamut is a fortress built on top of the mountain near the modern city of Tehran; it provides a view of the valley below (see Figure 2) with only one access route (Willey, 2001). This fortress was given many names in history books, including *Kal'at Al-Mout* (Arabic phrase meaning *the castle of death*); it was said that this name was given to it because it was believed that anyone who journeys there does not come back (personal communication with Hamid Maygoli a Persian Poet and Writer, March 15, 2008). *Alamut* is the name that typically appears everywhere in history. It is said that *Alamut* means Eagle's Nest, which is quite an appropriate name for such a fortress given its location.

The Assassin's Cult

The translation of *Umar El-Khayyam's* quatrains (famous Persian poet) by FitzGerald alluded to a tale which connects *Nizam Al-Mulk*, prime Minister of Seljuk Turks, *Hassan Al-Sabbah* and *Umar El-Khayyam* together (Willey, 2001). It is said that these three powerful men were schoolmates who vowed to help one another if one of them was in power. Thus, when *Nizam Al-Mulk* became prime minister, he offered *Umar El-kayyam* a position and regular stipend as a poet in the kingdom (Daftary, 1994) and appointed *Hassan Al-Sabbah* a high post in the Seljuk government. However, due to some disputes, *Nizam* plotted against *Al-Sabbah*, and caused his banishment from the kingdom portraying him as a traitor to the king (Daftary, 1994). *Hassan Al-Sabah* returned to Persia years later to form powerful alliances to destroy the leaders under the rule of *Nizam Al-Mulk* (Daftary, 1994).

Hassan Al-Sabbah conditioned and organized a number of followers who were trained to be political killers. Marco Polo documented (1254-1329) (Polo, 1997) that the old man of the mountain (referring to *Hassan Al-Sabbah*) was able to motivate his followers to embark on dangerous, sometimes suicidal missions, after drugging them with a substance called Hashish. According to the tale, *Al-Sabbah* constructed a heaven, often referred to as the ‘garden of paradise’ furnished with their interpretation of heavenly delights and women. The followers were drugged, taken to the garden, and later awakened to be told that they were in paradise. After they were able to fathom the luxury of such paradise, they were drugged again and taken away from the garden to a cave-like dwelling. They were then told that God had given them a preview of paradise, but in order to return to it, they needed to carry out some important tasks, including assassination, justifying such action by saying that their targets are evil men. The assassins that went on these missions were very dedicated, believing that they were Martyrs killing for God.

According to the myth, *Hashashin* was a name given to these fighters by their enemies. They probably referred to themselves as freedom-fighters (Daftary, 1995). The origin of the English word Assassin is said to have been derived from the word *Hashashin* (Willey, 2001). Others trace the origin of the word to the Arabic word *Al-Assassiun* which referred to people who resided in *Al-Assass* (Arabic word meaning foundation, one of the names given to *Alamut*) (Maalouf, 1994). In either case, the word *Assassin* is thought to have been derived from the name given to *Hassan Al-Sabah*’s followers, and is often used to this day to refer to organized murderers (Daftary, 1995).

References in the Game of the Story

For someone who is familiar with the back-story, the experience of playing the game is transformed to a search for references of the historical legend, perhaps hidden in the dialog, or in the calligraphic scriptures around the cities. There were several aspects of the game that tied well to the legend of the *Hashashin*. It should be noted that these references are perhaps unintentional on part of the game developers.



Figure 3. Screenshot showing the top of a high structure indicated in the game by an eagle icon. **Source:** *Assassins' Creed* ©Ubisoft.

It is interesting to note the metaphor of the eagle. This can be traced back to the ‘eagle’s nest’ or *Alamut*. This metaphor was used extensively within the game, including (1) *Altair*’s name, meaning the flying one, (2) his *eagle vision*, which enables him to distinguish between friend or foe, and (3) the *eagle points*, which are high-points to climb, scattered throughout the game-world, and enabling *Altair* to view the entire city

from above, thus extending his spatial mental map of the city (Figure 3 shows such a view).

In addition, the developers' diary (Raymond, 2008b) also referred to the fact that *Altair's* clothes were structured to make him look like an eagle when jumping and running across buildings. His monk-like hood had a pointed edge, and the bottom of his outfit was cut in a way that would silhouette eagle's wings in flight when seen from a specific camera angle (see Figure 4). The developer's diary (Raymond, 2008b) did not link *Altair's* outfit to Alamut, but rather, Jade discussed that such design was created to reflect *Altair's* movements, including his ability to fly (see Figure 5), move quickly, and jump from structure to structure.



Figure 4. Screenshot showing Altair, with his eagle-like shadow. **Source:** *Assassins' Creed* ©Ubisoft, taken from developer's diary [Raymond, 2008b].



Figure 5. Screenshot showing Altair flying from the top of the building down to a haystack. **Source:** *Assassins' Creed* ©Ubisoft

The game places *Alamut* in a location other than Iran, perhaps in *Masyaf* (see Figure 6 showing great resemblance to *Alamut* shown in Figure 2), which might justify the travel time within the game. The game also refers to a man by the name of *Al-Mualim* (the teacher), in the role of the leader of the Assassins' cult. It is not clear whether *Al-Mualim* is *Hassan Al-Sabbah*, the 'Old Man of the Mountain' as Marco Polo referred to him (Polo, 1997).



Figure 6. Artwork showing the Masyaf entrance. **Source:** *Assassins' Creed* ©Ubisoft, concept art.

Why this back-story?

As stated previously, the game-story is a work of fiction. However, the occasional references to actual historical facts and figures are undeniably interesting propositions that add depth to the game play experience and integrate a puzzle to be solved. For example, Jade mentions in the Developer's Diary (Raymond 2008b) that *William of Montferrat*, one of the assassin's targets, actually died in year 1191. Historically, it is unknown if he was killed by the assassins.

Working within this period evokes many controversial issues. Developers were well aware of the controversial nature of a game-story set in this period. The game tackled the political and religious aspects very well, keeping a balanced and unbiased representation of all conflicting parties involved. We asked Jade to clarify the period choice and how they balanced the story.

Magy Seif El-Nasr: The game takes place in a time of religious war. Why did you choose this period?

Jade Raymond: I think it's safe to say that the Crusades are an area we've wanted to explore for a long time, but we've been waiting for the technology to reach a point where we can do it justice. It's not enough for us to simply set the game there — we needed to capture the experience of living during this tumultuous time: the fusion of European and Middle-Eastern art and architecture, the hustle and bustle of medieval city life, the intrigue and political machinations of regional leaders, the gritty nature of ancient combat, the air of mystery that surrounds the secret societies that rose to power around this time.

We also chose this setting to keep a strong focus on the crowd. The team decided to focus on crowd and freedom of movement to deliver

new emergent types of game-play. The crowd has been designed as a living and breathing obstacle that you can influence through your second to second actions as well as through longer term strategies. Basically, we want to provide gamers with a level of immersion that was not possible on previous consoles. What better setting for interesting crowd game-play than narrow medieval streets filled with merchants, nights, public hangings and all of the street life from this gruesome time?

We also think gamers want more than another *Halo* or *GTA* clone. Maybe there is room for games to bring to life the kinds of settings that movies have made so memorable. (Movies like *Braveheart* or *Kingdom of Heaven* both share this epic feeling, we are trying to achieve in *Assassins' Creed*.)

Magy Seif El-Nasr: Why the Assassins' Cult? Several reviews critiqued the game in terms of its lack of references to religion, which I completely understand. Was that a design decision?

Jade Raymond: Knowing that our subject is controversial by nature we have dealt with religion as a purely historical background element. We can not completely avoid religion because it was the impetus for the war. We have, however, worked with cultural experts throughout production to make sure that we treat sensitive topics with respect. As the Saracens and Crusaders battle one another for control — the Assassins are working to find a way to end the hostilities. They see the war as pointless. There is no reason Crusaders and Saracens should not co-exist in peace. The Assassins are not allied with either side of the conflict, nor are they driven by a desire for profit or power. In *Assassins' Creed*, Crusaders (and the Saracens) are not the Assassins' true enemy. War is — as are those who exploit it.

(April 15, 2008)

Visual Design – Architecture, Environment, and Lighting

The environment depicted in *Assassins' Creed* is undeniably beautiful. Great time and effort was spent on detail and layout. For both Magy and Maha the game-play experience was a transportation to their homeland. Every corner, every shadow, every detail in the environment carried with it many nostalgic feelings. For Simon and David, the game world was not a virtual homecoming. For Simon, the experience of navigating through *Assassins' Creed*'s rich landscape of towers and mosques was a reminder of his visit to Istanbul, a town, like Jerusalem — a historical meeting place and crucible for the religious experience of Islam, Christianity, and Judaism. For all co-authors, the Arabic calligraphy on religious buildings, close courtyards, and cries of vendors created a rich sensory mélange (carrying with it the engagement described by Boorstin as *Vicarious eye* (Boorstin, 1990)).

To create such ornamental environment and rich landscapes, the developers of *Assassins' Creed* embarked on a research journey, contacting historians and learning

about the Middle-Eastern architecture that existed in the 12th century. Jade describes the design process in the following interview segment.

Magy Seif El-Nasr: In the developers' diaries, you mentioned that the cities in the *Assassins' Creed* game were constructed through consultation with experts, specifically historians. I was wondering how accurate were the details and how much artistic liberties were taken on the architectural details? Were all the cities and outskirts constructed with historians? How were the historians involved, were they involved in the design process, were they just interviewed by the designers, or did they see the cities from sketches to actual 3D models?

Jade Raymond: We contacted a Historian early in the conception phase of development to help us build a foundation of research. We have used the web, documentaries, old medieval encyclopaedias, paintings, and novels. The historian helped us with some harder to find information such as original city plans of Jerusalem, Damascus, and Acre that date back to the 3rd crusade. There is one book called “The Third Crusade 1191: Richard the Lionheart, Saladin and the battle for Jerusalem” that has been especially helpful because it covers the year in which our game takes place.

We did a lot of research on the cities and the surroundings. We discovered that during the Crusades, power changed sides many times and that is what makes the city so diversified in terms of architecture and design. In 1191 there were many structures which were used primarily for defence and others which were down right destroyed from the frequent assaults. The city had been under siege by the knights and soldiers for almost 3 years. We've added a cold blue filter to give this city a more modern look and its own unique personality (post war atmosphere). Each city in the game will have its own filter so players will be able to tell them apart in a glimpse of an eye.

(April 15, 2008)

Such design process is fascinating. In this section, we will discuss the architecture, environment, layout of the cities, and lighting in greater detail, specifically discussing Middle-Eastern architectural design patterns that tend to evoke nostalgic feelings for Magy and Maha.





Figure 7. Screenshots show the gradual process of narrative unfolding through the navigation of space. (Top left) The outskirts of the cities hold few ruins and little built structures. (Top right) The progression of the player is marked by a series of gates that serve as transitions in the narrative. This serves as a psychological preparation for entering the city. (Bottom) The city gates mark the actual enclosure of the city. **Sources:** *Assassins' Creed* ©Ubisoft

Environment design as a narrative

One may look at the progression and navigation through architecture as a narrative unfolding, as Meadows argues (Meadows, 2003). Architecture is composed of a beginning, middle, and end. In many buildings or cities, this progression towards the actual building is processed through steps, and marked by an entry gate. Entrances are emphasized by large structures, as a book cover emphasizes the story within (Meadows, 2003).

This is specifically evident in *Assassins' Creed* (see Figure 7), where the player starts off in the town's outskirts, a semi-desert surrounded by mountains. Gradual movement towards the holy city reveals a series of symbolic gates or check-points, which might serve as a territorial definer, rather than a physical enclosure. Upon crossing the final gate, which physically encloses the city, *Altair* magically transcends into the city. There, he is greeted by a typical Islamic/Arab city, filled by people of all types and social statuses, such as soldiers roaming suspiciously, commoners carrying on with their daily tasks, and beggars chasing for coins.

Lighting

Looking at the simulated illumination exhibited in the game, one can see some interesting design choices that influence the play experience. First, the game takes place entirely during the daytime. Indeed, the time of day doesn't appear to change at all from mission to mission, the sun is pretty much always at an afternoon angle. For Simon, the consistent day lighting limited the look of the game, as he missed the opportunity to sneak through the alleyways and rooftops of these cities at dusk or at night, or in the fog. To Magy and Maha constant sunlight brings, again, a nostalgic feeling of home. The weather in most parts of Egypt and Saudi Arabia is almost always sunny; it is rarely foggy or rainy. In fact, the architecture, as will be discussed later, is designed to protect its inhabitants from the harsh sunlight. It is interesting to juxtapose such experience to that of living in cities, such as Vancouver or Seattle, where houses and apartments are structured to allow maximum sunlight entry.

The daylight setting is also an interesting design choice, especially since most stealth games use lighting and lighting variation as a tactic for hiding. This game instead chose to focus on stealth tactics related to people and crowds. For example, instead of hiding in the shadows, one would hide in the crowd, such as a group of peripatetic scholars. In addition, daylight enables fast-movements and allows players to jump on different structures, which would be more difficult in the dark.

There are broad lighting color filters applied to each city (see interview excerpt above). The overall illumination tone is warm in *Damascus*, cool in *Acre*, and somewhat *greenish* in Jerusalem (see Figure 8). This appears to have been a motivated choice, and it has particular effect on the player's experience. The overall tone can be said to reflect the actual setting of each city: *Acre*, for example, is a seaside town, and the blueness of the simulated illumination is enhanced by a slight fogginess in the atmosphere. The climate in *Damascus* is the driest of the cities, so warm light is coupled with a bit of dust to evoke a feeling of drought; *Jerusalem*, in contrast, receives 4 times more rain on average (600mm), so the subtle detail one notices here is floating cottonwood seeds and flowers. These overall tones help create a feeling of visual verisimilitude, as well as a subtle contrast and identity for each town.

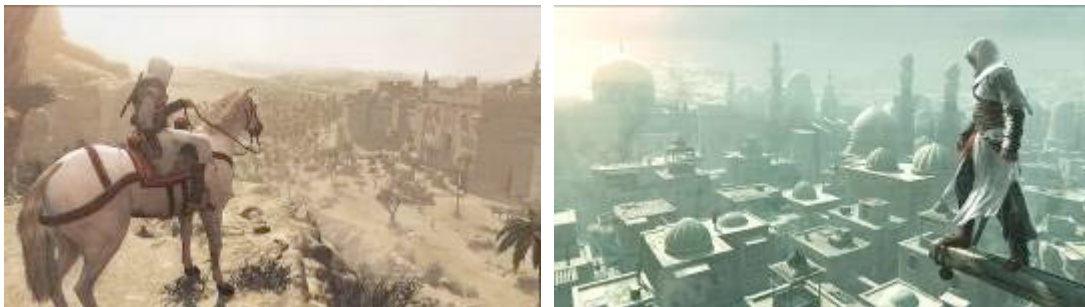


Figure 8. Screenshots showing the moody color schemes. (Left) *Damascus* lit in warm colors. (Right) *Jerusalem* lit in greenish tint. **Source:** *Assassins' Creed* ©Ubisoft.

There is also a subtle emotional effect that directly results from the contrast between these tones. Recent research has demonstrated that the color of simulated illumination has an effect on player affect and performance (Knez & Niedenthal, 2008). Warm illumination tends to produce positive affect and enhanced performance when compared to cool illumination. This effect is palpable in *Assassins' Creed*, and is particularly noticeable in contrast to the experience of moving from *Damascus* (warm) to *Acre* (cool).

Patterns of Middle-Eastern Architecture found in *Assassins' Creed*

One may look at an Islamic/Arab city and this it is a collection of irregular shapes, abiding by no planning rules, and indicating an absence of planning authorities (see Figure 9 and 10). In comparison, a traditional Islamic/Arab city contains building elements that are fine and small, unlike modern-day cities, which contain large, coarse granular elements within their urban fabric (Habraken, 1998). Unlike Western urban planning systems at that time, the land of Islamic/Arabic cities was considered no one's property. Thus, inhabitants were in charge of their own well-being; they could build their own houses in accordance to their needs, climate, and environment. As a result, people defined their own territory and built houses to suffice their current requirements.

Neighbours came along to develop aside, following the known construction conventions, using available techniques, repeating patterns, learning from each others' mistakes, and copying successful design solutions. A coherent neighbourhood resulted, and that neighbourhood's territory was sometimes defined by the addition of a gate. In this neighbourhood (Figure 9), every house is unique, yet fits with the rest of the composure. The result of these individual, accumulative works is a city which grew in a bottom-up manner (Akbar, 1988). This organic city looks like a maze, and is perhaps interesting to explore, get lost in search of surprise elements within each corner. Each alley conceals a gem to be found, or in the case of this game, more trouble to deal with. In their constant change, and because the private houses are in a higher level of control, houses may sometimes engulf streets, or portions of them, as part of their territory. The result is an alley full of corners or a zigzagged neighbourhood.



Figure 9. These two screenshots depicts the organic and chaotic nature of Arabic cities at the time, which is confirmed by architectural and historical resources. **Source:** *Assassins' Creed* ©Ubisoft.



Figure 10. The growth of a traditional Islamic/Arab city, in which the Fabric is distributed along the spine of a large public street, branching into smaller narrowing alleys. It is along wide public streets, and public squares that most public affairs take place.

Even though it might seem that the people are free to build wherever they like and whatever fits their needs, they are constrained by Islamic rules and principles. These constraints resulted in emerging patterns. Stefano Bianca identified several values that affected the growth of Islamic/Arab cities, including: modesty, privacy, and protection (Bianca, 1994). Jamel Akbar stated that one cannot fully understand a typical urban environment, without reference to the origin of these Islamic principles (as dictated in Islam's two main sources: the Quran^{iv} and the Hadeeth^v) (Akbar, 1988).

Patterns in Middle-Eastern Architecture

As we navigate through the environments of *Assassins' Creed*, we identify five visual patterns as discussed by Kevin Lynch's (1960) *Image of the City*:

1. zigzagged, narrowing **paths** called *darb* (see Figure 11)
2. **edges** that are seldom right angled
3. **districts** that are occupied by certain ethnic groups or occupations
4. **nodes** that are occupied by city squares and markets (see Figure 12)
5. most importantly, **landmarks** such as mosques, churches, and castles (see Figure 13)



Figure 11. The edges of the city branch into narrowing paths and alleys, or what one may call a *Darb* in Arabic. **Source:** *Assassins' Creed* ©Ubisoft.



Figure 12. Public spaces in the city. (Left) Art work showing the public market. (Right) A screenshot showing the city square, **Sources:** *Assassins' Creed* ©Ubisoft.



Figure 13. Important architectural features and landmarks in Islamic/Arab cities, including mosques, minarets, and domes. **Sources:** *Assassins' Creed* ©Ubisoft.

In addition, Christopher Alexander's *A Pattern Language* (1977) describes a city as an environment composed of a series of local patterns and rules. He states that it is up to the

designer to derive these patterns from the environment, and apply them to make an attractive city of a certain quality (Alexander et al., 1977). If we were to derive the visibly prominent architectural features that identify an Islamic/Arabic city, we will find the following elements:

- Adjacent houses
- Courtyards
- Flat rooftops (see Figure 15)
- *Mashrabiya*s or screened windows (see Figure 14)
- Domes (see Figure 15)
- *Saabaats* or hanging bridges (see Figure 16)
- Mosque's minarets. (see Figure 17)
- Building materials made of sand and stone
- exposed wooden beams



Figure 14. Mashrabiya or screened windows. **Source:** *Assassins' Creed* ©Ubisoft.



Figure 15. Flat rooftops and Domes. **Source:** *Assassins' Creed* ©Ubisoft.



Figure 16. Sabaats or beams extended from house to house. The beam and bridge extension between neighboring houses, symbolizing an important Islamic principle of coherence between neighbors, causing in a continuing cohering neighboring. **Source:** *Assassins' Creed* ©Ubisoft.

In order to give an Islamic/Arab city justice in analysis, we will not simply identify these elements, but also understand their roots. These patterns or distinguishing features have developed through time, and have been influenced by many factors. For example, the minaret, one of the most prominent features in an Islamic/Arab city, depicted in Figure 17, is a slender tower, which existed in a time before the invention of loud speakers. Its origin is traced back to a purely functional existence, where a *muezzin* (Arabic word meaning the person who performs the *Athaan* or a call for prayer) had to climb on a high place so that he could perform the call for prayers and be heard from a distance. It is also said that the first *minaret* was a palm tree branch. Throughout the ages, a slender tower emerged, covered with ornamentation, representing the existence of a mosque. The later introduction of speakers has eliminated the need for muezzins to climb a high tower, but most mosques keep it as a symbol, an ornament, that can be recognized from afar. In Muslim cities such as Saudi Arabia, mosques usually have green fluorescent lights that illuminate the mosque from afar.



Figure 17. The Minaret, one of the most distinguished landmarks found in a Islamic/Arab city. The main function of minaret in the game is to act as a tower for *Altair* to climb and view the city. **Source:** *Assassins' Creed* ©Ubisoft.

Cultural Significance of these patterns

The patterns identified above have emerged as significant landmarks of an Islamic/Arabic city. They are shaped by Islamic principles, as well as climate conditions. An Islamic/Arab city, as previously discussed, is known for its narrow streets, adjacent neighbourhoods, and crowded houses. Figure 18 shows some of these design patterns portrayed in the game. Such structures have evolved in response to climate conditions, such as the harsh sun rays, dusty winds, humidity, noise, and crowded streets. In this section, we discuss the structures evident in a traditional Islamic/Arabic typical building through the lens of both Islamic principles and climate conditions.



Figure 18. Narrow alleys/corners provide shade from the harsh sun rays. Doors are placed so that they do not face one another, in case one is open, revealing the house's interior. **Source:** *Concept artwork provided by Assassins' Creed* ©Ubisoft.

Perhaps one of the most prominent principles of an Islamic society is privacy. When referring to the following verse: “[...] Tell the believing men to reduce [some] of their vision [...]” (Quran, 24:30), one can interpret it a teaching that requires men to reduce their vision, by looking away, when confronting the attraction of a woman. Privacy has been given a great deal of importance in many aspects of a Muslim's life, ranging from the concept of Hijab^{vi}, or the moral actions in public that have been mirrored by the architecture. Some have romanticized their description of Muslim house designs by saying they symbolized the concept of Hijab. When observing a Muslim house, one cannot help but see this resemblance (see Figure 19). A verse in the Quran speaks of house privacy as follows: “[...] and a party of them asked permission of the Prophet, saying, ‘Indeed, our houses are awrah^{vii} [...]’” (Quran, 33:13). From this verse, it is evident that the principle of privacy is very valued in the structure of the house, to the extent that the exposure of its interior was considered an *awrah*.



Figure 19. The roof garden, in resemblance to the veil, protecting the privacy of the house. In these houses, courtyards are an essential window to the outdoors. In regards to the house interior, it is regarded as a private thing that needs to be veiled, and that is how the Mashrabiya acts, as a veil. **Source:** (left) *Assassins' Creed* ©Ubisoft.

Unlike the open nature of a modern Western houses, window openings are regarded as a flaw invading the privacy, that must be dealt with appropriately. Accordingly, many building solutions have evolved. For example, houses were built with inner courtyards (shown in Figure 20) and open roofs to provide the family with a space for outdoor activities while maintaining privacy (as the inhabitants are behind the house walls). It provides lighting and ventilation without breaking the privacy rule.



Figure 20. Courtyard. **Source:** *Assassins' Creed* ©Ubisoft.

In contrast to having windows that overlook the street, Islamic/Arab houses have inward oriented windows that open to the courtyard (also called *Mashrabiya*s, see figures 14 and 21). They provide the surrounding rooms with lighting and ventilation, while protecting the children's and women's privacy. Since Muslim women are not required to wear the veil inside their houses, this provides a sensible solution to provide women some freedom while enjoying the outdoor world. The courtyard solution was a result of years of experimentation with architectural designs.

Both courtyards and screened windows (*Mashrabiya*s) were used extensively as a climate solution, as well as a privacy provider (see Figures 14 and 21). Figure 21 shows an image of a *Mashrabiya* taken from within a modern Arabic house. *Mashrabiya*s are usually made of wood. Although a Westerner's eye might interpret them as jail bars, they provide an outward orientation that provides light and ventilation generously, while protecting the interiors privacy.



Figure 21. *Mashrabiya* taken from an Islamic/Arab house. **Source:** <http://www.flickr.com/photos/jamalaly/99639047/>

Another principle that is quite evident in Islamic/Arab architecture is modesty which can be described as being minimalistic. This principle is also detailed in the following hadeeth, where the prophet passed by a group of people building a roof, and instructed them not to spend too much time elaborating beyond its intended function, saying: “the matter [should be] faster than that” (Ibn Maja, Book of Zohd, On Building and Ruins, Hadeeth #4150). People were advised not to spend too much time on building

unnecessary things. Thus, we find that many houses grow to be simple in nature, yet are *functionally sufficient*.

The referral to circulation standards is found in this hadeeth: “When there is a disagreement about a path, its breadth should be made seven cubits^{viii}” (*Al-Bukhari, Book of Al-Mathalim "Injustices"*, Hadeeth #2293). Seven cubits measure about 4-5 m, allowing sufficient circulation space for the passage of people and load-carrying animals. This was, of course, before the introduction of modern means of transportation. It emphasized the need for standards based on circulation and functional needs.

In addition, neighbourly ties are very important. There are several hadeeths that emphasized principles of a neighbourly attitude when architecting a house. For example, the hadeeth stating “there must be neither harm nor the imposition of harm” (Malik, Book of Aq'deeya, on justice in utilities, Hadeeth #1234) is interpreted as stating that one is allowed maximum freedom to build as long as he/she does not cause harm to oneself or others. Another hadeeth states “none amongst you should prevent his neighbour from fixing a beam in his wall” (Al-Bukhari, Book of Al-Mathalim "Injustices", Hadeeth #2283) specifically imposing the same principles of strengthening neighborly relations. As a result we find many coherent attached houses and structural wooden beams extending between them (see Figure 16).

Saabaats (see Figure 16) are bridges connecting private properties together, to allow inhabitants to move through internal rooms without having to go through the streets. It is used when family members increase, and there is no space for extension. In this situation, the family buys properties from adjacent families and connect them through different means, including those *Saabaat* bridges.

Architectural patterns and their use for game play

Game-play in regards to Isbister's (2007) design and evaluation for richer human connections and experiences, also synergistically addresses emergent dynamics, moment to moment experience, and subtle signals. While for David and Simon the emergent dynamics and moment to moment experience provided the bulk of the play experience, subtle signals that Maha and Magy would have experienced (as Isbister points out) were not experienced by David and Simon, which was understandable since they were not members of the same culture. While the architectural patterns discussed above offered an overall nostalgic feelings through the exciting exploration of game environment, and thus offered a rare experience of transportation back home to both Maha and Magy, the Islamic back story, sub-cultural divisions, and middle-eastern nature of the architecture were much less apparent for David and Simon.

For David and Simon, the experience of game-play is engulfed by a feeling of indifference towards the towns that appear to be motivated by site— wet pitched roofs in Acre and Jerusalem's houses vs. the dry flat roofs in Damascus, which influence the platforming game-play model. Instead, the game play experience for David and Simon tends to focus on the plot and architectural patterns as a function of game-play. For example, the vertical multi-layering of the architecture was especially compelling for game-play as the movement on rooftops presented a great motivation for stealth, and provided great means for escaping from enemies. Also, climbing towers for an overview

of the streetscape is a highlight of the game in itself. Although sometimes criticized as “too easy,” it demonstrates the power of the vertical aesthetic (Johansson, 2003).

The design of the architecture to facilitate the mentioned game-play aesthetic was extensively explored by the game developers. Patrice Desilets (2008), *Assassins' Creed* Creative Director, describes several game mechanics, including flower-box design, which he described as a mechanism that gives the player freedom to “go anywhere and interact with anything...everything you can do with your freedom is driving the story forward...everything is well placed to experience your freedom in a narrative structure”. It is, thus, intentional, that the player was not given clear direction, and is engulfed in an environment that appears chaotic and disorganized although exquisitely detailed.

However, these moments of potential confusion are interrupted often by special camera movements or cut scenes to better frame, or orient the participant in relationship to the environment and story. In a similar effect, Ching (1996) discusses and illustrates how form, space, and order can introduce, explain, or suggest activity for a given point of view. This can be seen in several camera movements within the game, such as the many expansive camera pans of the entrance gates (see Figure 22), a vertical shot up a mountain, an orbit shot around a sacred monument, or even when the environment is removed altogether by the Animus machine and only characters are left (see Figure 23). This resonates well in Thiel's “People, Paths, and Purposes” where he describes that environmental design can be understood based on the eye-level experience of the users in the course of their movement through the environment (Thiel, 1996) Lastly, the juxtaposition of the attention grabbing Animus animated overlays indicates that certain people and places are key to unlocking memories to continue the narrative. Thus when these signals appear, there is special emphasis on these detailed items which often is culturally significant to the back story. In terms of game-play, these elements combined were enough for David and Simon to deeply engage within *Assassins' Creed* narrative (depicted through the environment).



Figure 22. Damascus City Gates Camera pan interrupts the gameplay and introduces the player to the city. **Source:** *Assassins' Creed* ©Ubisoft.



Figure 23. The Environment is removed bringing focused attention to the cut-scene. **Source:** *Assassins' Creed* ©Ubisoft.

Character

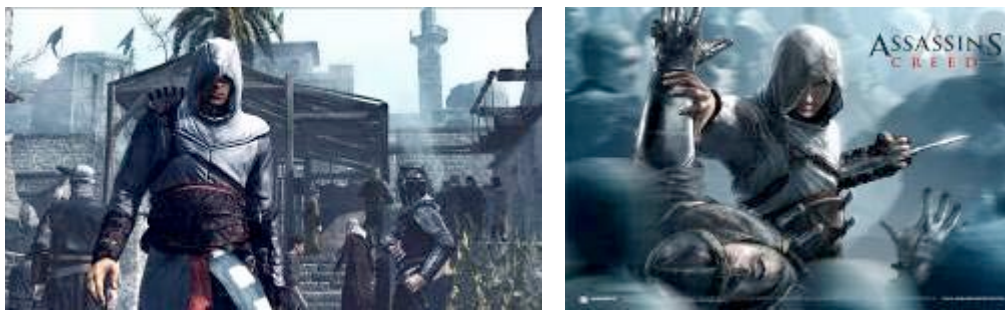


Figure 24. *Altair's* unremarkable facial expression. **Source:** *Assassins' Creed* ©Ubisoft.

Player Character

While solid structures carry many of the cultural elements within the game, they were not the sole factor. Characters in the game carry many cultural elements depicted in their behaviour, mannerisms, inflections, and accents. Unfortunately, the player's character, *Altair*, fails to convey the Middle-Eastern culture or behaviour. To the mere observer, he is monk in disguise (see Figure 24). His actions, behaviours, mannerisms, complexion, and clean-shaved face portray him as an all-American hero. In fact, his accent betrays him the most, and one soon starts to wonder if such a design decision was deliberate, perhaps to gain acceptance amongst the Western audience, in the hopes of identifying themselves with the protagonist. Several reviews have discussed this issue. For instance, myp3's review (www.myps3.com.au/GuideDetail.aspx?id=38) criticized *Altair's* voice-acting, stating that it was blatantly American, when it should have been Middle-Eastern. The accent was not the only issue of criticism when it comes to *Altair's* Americanization, but his choice of words in dialogue beamed of American culture, as many game-players have stated. In our interview with Jade, the response to this critique was as follows:

Altair was played by an American born actor of Middle-Eastern origin. His name is Phil Shahbaz. The reason that *Altair* speaks with an American accent is related to the fact that it's not really *Altair* talking; the whole experience is being processed by Desmond (a modern American guy) through the Animus. Desmond is trying to relive *Altair's* life but is building on his own experience.

(April 15, 2008)

Through dialogues between *Altair* and *Malik* (a non-player character also within the Assassin's cult), it was evident for Magy and Maha that *Malik* portrays Arabic behaviours more believably than *Altair*. (Ferghali, 1998; Sampson, 1997) discuss Arabic gesture patterns and non-verbal behaviour. Applying this theory to the current comparison of character behaviours in *Assassins' Creed*, we find that *Malik's* gestural patterns are different from *Altair* and more reminiscent of Arabic culture. Also, the use of personal space was different between Arabic characters and other characters in the game, again more reminiscent of Arabic culture.

The body language and depiction of *Altair* were exaggerated and foreign when compared to other characters. Figure 25 shows screenshots depicting *Altair's* posture. The posture is generally constructed with the head bowed down and slightly forward, arms towards the back opening the chest (not subtle but exaggerated). This posture when animated, through walking or running, shows a lead with the head followed by the chest. According to Delsarte, a French singer who studied relationships between physical behaviour, emotion, and language to formulate the most comprehensive scientific model for body motion known in history, head attitudes signify cognitive load. A head pointed forward shows scrutiny and reflection (Zorn, 1968). Also, from Improvisational theatre workshops, torso and head pointed forward signify resolve. Thus, we can deduce that *Altair* through this exaggerated posture depicts a reflective and determined character.



Figure 25. Screenshots showing *Altair* posture while walking. **Source:** *Assassins' Creed* ©Ubisoft.

In David and Simon's viewpoint, non-player characterization and authenticity was unclear. A Disneyland ride such as Aladdin's adventure raises obvious cultural stereotypes yet since the differences are more subtle in *Assassins' Creed*, this line is more difficult to describe. Thus, the authenticity of Arabic-to-English translation, accent, mannerisms, and inflections are not known and can easily be muddled or misinterpreted. As a result, a Western viewpoint may increase a "foreigner persona" and reinforce *Altair's* pre-programmed detached and Americanized heroic behaviours (Figure 26). Unknowingly to the player, this may serve to further distance her or himself from the story being told.



Figure 26. Altier on a surprise attack to an unsuspecting guard which reinforces his Americanized hero persona. **Source:** *Assassins' Creed* ©Ubisoft.

Non-Player Character

Characters in *Assassins' Creed* come in two flavours (see Figure 27). First, there are supporting characters, which are important to the plot, such as *Al-Mualim*, *Malik*, and *William of Montferrat*. These characters received much attention from the animators, developers, and writers. This is evident through their voice acting, animation, and dialog. *Al-Mualim*, for example, was excellently done. He portrayed an image of a mysterious and firm man – a man whose presence commands obedience and discipline. However, his voice acting and motion capture were not very Middle-Eastern.

To further get a feel of how many of these actors were of Middle-Eastern origin, we asked Jade.

Magy Seif El-Nasr: How many of the characters: voice actors, or motion captioned actors were of Middle-Eastern origin? Can you name them? My assumption was that *Malik* was one of the characters who had a distinct Arabic accent and gesture, but I was not sure about the others.

Jade Raymond: For casting we actually did part of our casting in LA because we wanted to use as many native Arab speakers as possible and there are not very many native Arab speakers in Montreal. I don't remember all of the actors of eastern origin but here are a few:

- Peter Reneday - (*AL-MUALIM*)
- Haaz Sleiman - (*MALIK A-SAYF*)
- Ammar Daraiseh - (*TAMIR*)
- Many crowd characters:
 - Shirin Amini
 - Idar Darvish
 - Zuhair Haddad
 - Ghassan Mashini
 - and others.

It is interesting to note that as Magy suspected, *Malik* was identified as one of the actors of Middle-Eastern origin. Interestingly, *Al-Mualim* was identified by Jade as someone with Middle-Eastern origin, although his name does not indicate that, and Magy could not identify his gestures and body movements as typically Middle-Eastern.

The second kind of characters supported in the game is the background characters. In order to simulate a city like Jerusalem or Acre, it is not enough to devote time to detail and depth as was beautifully done in *Assassins' Creed*, but crowd behaviour is also of utter importance. Much attention was given to crowd. According to Jade (Raymond, 2008b), the team created 300 or more different character types to add variety to the game. These characters were not all Middle-Eastern, there were French, English, mixed with Middle-Eastern crowd.

For a Middle-Easterner, it was interesting to hear ambient Arabic words uttered every now and then in the corners as one navigates through the cities. The dialog and accents, however, did not match the cities or geographical location. For example, an ambient dialog is heard with clear Egyptian accent and dialect while the player is navigating through Damascus where one would expect to hear a Syrian accent. These ambient dialog lines were also repeated through out the game. An example phrase was “Um Muhammad! izzay Muhammad?” which means ‘Muhammad’s mother! How is Muhammad?’ This was great to hear the first time as it brought back memories of Egypt. However, repeating it over and over didn’t make sense and detracted from the experience of the game.



Figure 27. Characters in *Assassins' Creed*. **Source:** *Assassins' Creed* ©Ubisoft.

Conclusion

In this paper, we have analyzed the experience of playing the *Assassins' Creed* game through the eyes of the authors representing different cultures. We believe that the game play experience is a culturally mediated and shaped through cultural knowledge and beliefs and previous experience. The analysis provided here shows a sample of such experience.

This analysis provides as an intellectual companion to the game allowing people from different cultures to understand and appreciate the viewpoint that each person and each culture can bring as they play the same game. It also provides several lessons for game design and marketing teams. Perhaps the most obvious and valuable lesson is that choosing the market for the game and understanding the cultural (or sub-cultural) norms, knowledge, and attitudes is of extreme importance as such variables have direct effect on how the game is accepted, viewed, and played. It should be noted that this is not only true for games like *Assassins' Creed* that simulate a realistic setting with very high fidelity graphics. We believe this is also true for stylistic games.

In conclusion, we would like to position this review as a new type of review that is an eye opener to the variations of the play experience, and the role of culture, previous experience and knowledge play in reading and playing a game. As J. Clifford described

in his article *on Ethnographic authority*, “recent literary theory suggests that the ability of a text to make sense in a coherent way depends less on the willed intentions of an originating author than on the creativity of the reader [...] One may also read against the grain of the texts’ dominant voice, seeking out other, half hidden authorities, re-interpreting the descriptions, texts, and quotations gathered together by the writer” (Clifford, 2003, 133). Although Clifford was speaking of ethnography, one can see the parallel in describing gaming experiences through a one authoritative perspective. This review breaks the norm to make evident the heteroglossia—that characterizes players uptake of games and their gaming experience.

Acknowledgements

We would like to thank *Ubisoft* and their production team for all the help they have given us throughout the process of writing this paper. Specifically, we would like to thank Ms. Jade Raymond for agreeing to be interviewed and for her quick and elaborate responses to our interview questions. We would also like to thank Mr. Christophe Martin and Mr. Luc Duchaine for all their help, and for expediently compiling the high resolution images used in the paper.

References

- Akbar, J. (1988). *Crisis in the Built Environment*. Boston: Brill Academic Publishers.
- Al-Bukhari, M. I. (846). *Sahih Al-Bukhari*. Retrieved April 15, 2008 from <http://hadith.al-islam.com>.
- Alexander, C., Ishikawa, S., and Silverstein, M. (1977). *A Pattern Language*. New York: Oxford University Press.
- Bianca, S. (1994). *Urban Form in the Arab World*. New York: W. W. Norton & Co Inc.
- Boorstin, J. (1990). *Making Movies Work: Thinking Like a Filmmaker*. LA, CA, Silman-James Press.
- Clifford, J. (2003). On Ehtnographic Authority. *Turning Points in Qualitative Research*. Lincon, Y. S. and Denzin, N. K. (Eds). Walnut Creek, CA: AltaMira Press.
- Csikszentmihalyi, M. (1990). *Flow: The Psychology of Optimal Experience*. New York: Harper & Row Publishers, Inc.
- Csikszentmihalyi, M. (2000). *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play*. San Francisco, CA: Jossey-Bass.
- Congressional Research Service. (2004). Islam: Sunnis and Shiites. *Congressional Research Service Report, Federation of American Scientists*.
- Ching, F. D. K. (1996). *Architecture: form, space & order*. New York: Van Nostrand Reinhold.
- Church, D. (1999). Formal Abstract Design Tools. *Gamasutra*.
- Daftary, F. (1995). *The Assassin Legends: Myths of the Isma'ilis*. I. B. Tauris.
- Desilets, P. (2008). "Assassin's Creed Developer's Diary Freedom." Assassin's Creed Official Website hosted by Ubisoft at http://assassinscreed.us.ubi.com/agegate.php?destURL=/index_live.php. (accessed 3/30/2008)
- Duarte, J., Ducla-Soares, G. Caldas, L., Rocha, J. (2006). Grammars in design. In J. Gero (Ed.), *An Urban Grammar for the Medina of Marrakesh*. Design Computing and Cognition '06: Springer Netherlands.
- Feghali, E. (1998). Arab Cultural Communication Patterns. *International Journal of Intercultural Relations*, 21(3), 345-378.
- Fullerton, T., Swain, C., and Hoffman, S. (2004). *Game Design Workshop: Designing, Prototyping, and Playtesting*. CMP Books.
- Habraken, N. J. (1998). *The Structure of the Ordinary*. Cambridge: MIT Press.
- Hunicke, R., M. L. Blanc, et al. (2004). MDA Framework for Game Design. *AAAI 2004: Game AI Workshop proceedings*, San Jose, CA: AAAI Press.
- Ibn Maja, M. Y. (unknown). *Sunan Ibn Maja*. Retrieved April 15, 2008 from <http://hadith.al-islam.com>.

- Irna website. Retrieved May 12, 2008 from <http://www2.irna.ir/occasion/es/index1.htm>.
- Ismaili.NET website. Retrieved May 12, 2008 from <http://ismaili.net/histoire/photo/28alamut.jpg>
- Jenkins, H. (2004). Game design as narrative architecture. In N. Wardrip-Fruin, & P. Harrigan (Eds.), *First person : New media as story, performance, and game* . Cambridge, Mass.: MIT Press.
- Johansson, T. (2003). Vertigo and Verticality in Super Monkey Ball. *Level Up: Digital Games Research Conference*, Netherlands.
- Knez, I. and Niedenthal, S. (2008). Lighting in Digital Game Worlds: Effects on Affect and Play. *Journal of CyberPsychology & Behavior*, 11(2).
- Lynch, K. (1960). *The image of the City*.
- Maalouf, A. (1994). *Samarkand*. Abacus; New Ed edition.
- Malik, M. A. (unknown) *Al-Mowat'ta*. Retrieved April 15, 2008 from <http://hadith.al-islam.com>
- McPeck, R. W. E., John D. (1975). Expectancy disconfirmation and attitude change. *Journal of Social Psychology*, 96(2), 192.
- Meadows, M. S. (2003). *Pause and Effect: The Art of Interactive Narrative*. Berkeley: New Riders Press.
- Mikulincer, M. (1990). Joint influence of prior beliefs and current situational information on stable and unstable attributions. *Journal of Social Psychology*, 130(6), 739-753
- Polo, Marco. (1997). *The Travels of Marco Polo*. Wordsworth Editions Ltd.
- Quran. (621-632). English translation retrieved April 15, 2008 from <http://www.sultan.org>
- Raymond, J. (2008a). "Developer's Diary on Story." Assassin's Creed Official Website hosted by Ubisoft at http://assassinscreed.us.ubi.com/agegate.php?destURL=/index_live.php. (accessed 3/30/2008).
- Raymond, J. (2008b). "Developer's Diary on Art Direction." Assassin's Creed Official Website hosted by Ubisoft at http://assassinscreed.us.ubi.com/agegate.php?destURL=/index_live.php. (accessed 3/30/2008).
- Sampson, K. L. (1997). *Arab Culture*: Defense Language Institute.
- Staiger, J. (2000). The perversity of spectators. Explaining the history of classical hollywood cinema. In Bondebjerg (Ed.), *Moving Images, Culture, and the Mind*. United Kingdom: University of Luton Press.
- Silvestre de Sacy, A.L. (1818). "Memoir sur La Dyanastie des Assassins, et sur L'Etymologie de leur Nom". *Memoires de sins, et sur l'Institut Royal de France*, Vol. 4, pp. 1-84.

- Thiel, P. (1996). *People, paths and purposes: Notations for a participatory envirotecture*. Seattle: U. of Washington Press.
- Willey, P. (2001). *The Castles of the Assassins*. Linden Publishing.
- Vallerand, R. J. B., Marc R. (1989). Exploratory analysis of the prevalence of self-related affects in achievement situations. *Journal of Social Psychology*, 129(3), 365.
- Van Ord, K. (2008). Assassin's Creed Review. *GameSpot*.
http://www.gamespot.com/ps3/action/assassinscreed/review.html?om_act=convert&om_clk=gssummary&tag=summary;review. Accessed April 26, 2008.
- Zorn, J.W. (Ed.). (1968) *The Essential Delsarte*. Metuchen, NJ: Scarecrow press,
- Joynt, Patrick. (2008). Assassin's Creed Review. *GameSpy*.
<http://ps3.gamespy.com/playstation-3/project-assassins/834696p1.html>. Accessed April 26, 2008.

ⁱ The *Athaan* is the Muslim call for prayer, and is recited by a muezzin. It is broadcasted from minarets (mosque towers) in the streets of Muslim cities five times a day. It is also referred to as: athan, adhan, azaan and azzan.

ⁱⁱ Muslims usually include the initials (p.b.u.h.) after mentioning a monotheistic prophet's name. It stands for "Peace be upon him", and shows their respect for the prophet whom they are mentioning. It is a common misunderstanding that they only use it for Prophet Muhammad (p.b.u.h.).

ⁱⁱⁱ At the peak of its time, the Fatimid Empire ruled over much of the Middle-East, including North Africa, Sicily, Yemen, and Syria, with Cairo as the capital.

^{iv} The Quran, is a sacred scripture, which translates: "the recitation". It is considered by Muslims to be God's final revelation and guidance to mankind. It has been revealed in Arabic more than 1400 years ago. Its original Arabic wording has remained preserved and unchanged to this day.

^v The *Hadeeth* is also referred to as the *Sunnah*. It is the collection of the Prophet Muhammad's (p.b.u.h.), life and sayings, as narrated by his companions.

^{vi} The Hijab refers to the wearing of modest dress and veil for Muslim women.

^{vii} The Arabic word "*awrah*" may not have an equivalent word in English, but it can be best translated as: exposed, unguarded and require protection. The word *Awrah* is usually referred to the body parts that Muslims were instructed to cover, in pursuit of decency. In this example, the referral to the house as an *awrah* indicates that it conceals privacy, particularly female relatives, which require protection in the case of a non-Muslim army raid on their town. The importance of honour and privacy protection was a matter of great importance in those days that it was used by many hypocrites (*monafiqeen*) as an excuse for not joining the army.

^{viii} An Arabic cubit measures about 54 - 65 cm.